

art to have modified the system of Tamagaki for storing processing status information of print jobs by a non-volatile memory as taught by Bender.

The rejection of respectfully traversed.

I. As noted in the response dated June 14, 2001, Bender teaches away from the present invention and the arrangement of Tamagaki. More specifically, Bender teaches that a (preferred) printer stores **all the print job data** in a “non-volatile memory” so that when power is lost before a particular print job has been entirely printed, this fully buffered print job will remain in the non-volatile memory indefinitely until the power is restored. No other use of a non-volatile memory is disclosed or suggested in Bender. Thus, there is no problem of printing data being lost in the non-volatile memory of Bender and no need to issue a resend request to the host computers that sent the printing data.

In response, the Examiner asserts that “the advantage of Bender’s system clearly discloses the non-volatile memory does not only store print jobs but also stores information of those print jobs. This advantage of Bender’s system does not need to waste time in order to request for resending other print jobs because these print jobs and all print job data are not lost if the power is lost.” After fully recognizing what is actually taught in Bender, the Examiner subsequently contends that, “Since Bender’s the non-volatile memory stores the status information of the print jobs, this feature can modify to the deficiency of Tamagaki’s system”.

However, such contention is clearly based upon improper hindsight reconstruction of the claimed invention as Bender specifically discloses that the “non-volatile memory” stores all the print job data, not just a part of it. Given such disclosure, a person of

ordinary skill in the art would use the non-volatile memory of Bender in the manner in which Bender teaches to used; i.e., to store all the print job data. Therefore, if the arrangement of Tamagaki were modified in view of the teaching of Bender, Tamagaki would be modified to provide a non-volatile memory to receive **all** the print job data, negating the need for a resend request to be sent since none of the data will be lost due to any of the trouble conditions identified in Tamagaki.

It is imperative for the decision maker to place himself back in time to when the invention was unknown, i.e., without the Applicants' disclosure at his side, and determine, in light of all the objective evidence bearing on the issue of obviousness, whether one having ordinary skill in the art would have found the claimed invention as a whole obvious under 35 U.S.C. 103. *Panduit v. Dennison Mfg. Co.*, 774 F.2d 1082, 227 USPQ 337 (Fed. Cir. 1985), vacated, 475 U.S. 809, 229 USPQ 478 (1986), aff'd. on remand, 810 F.2d 1561, 1 USPQ2d 1593 (Fed. Cir. 1987).

It should be recognized that the fact that the prior art could be modified so as to result in the combination defined by the claims at bar would not have made the modification obvious unless the prior art suggests the desirability of the modification. *In re Deminski*, 796 F.2d 436, 230 USPQ 313 (Fed. Cir. 1986).

Recognizing, after the fact, that such a modification would provide an improvement or advantage, without suggestion thereof by the prior art, rather than dictating a conclusion of obviousness, is an indication of improper application of hindsight considerations. Simplicity and hindsight are not proper criteria for resolving obviousness. *In re Warner*, 379 F.2d 1011, 154, USPQ 173 (CCPA 1967).

It is impermissible simply to engage in hindsight reconstruction of the claimed invention, using Applicants' structure as a template and selecting elements from references to fill in the gaps. *In re Gorman*, 18 USPQ2d 1885 (Fed. Cir. 1991).

Clearly, the Examiner's rejection to use the non-volatile memory of Bender to store only a part of the information that the reference teaches to store is an example of the Examiner using the present disclosure as a template and then selecting elements/features from Bender to fill in gaps in Tamagaki. Since both Bender and Tamagaki are analogous art, a person of ordinary skill in the art realistically will use the non-volatile memory of Bender in the manner taught in the reference; to store all the print job data. Thus, unless the Examiner can identify a portion in Bender that discloses or suggests that such non-volatile memory need only store status information, the Examiner suggestion to use it in such manner clearly evinces improper use of hindsight considerations.

Also, in the present invention, the controller, when power is restored to said volatile memory after being interrupted and the determining means determines that there are any print jobs that have not been printed, **clears the respective image data address in the non-volatile memory prior to the image data being resent** by the corresponding terminal device. The Examiner now replies that "Tamagaki teaches the backup memory just only stores the information of the print data when the print data is lost due to some error of the printer including the lost power. Therefore, the information of the lost print data would be inherently deleted from the memory because the printer does not need that information anymore when it performs printing with that resend print job. Also, Bender do the same concept that the printer deletes the information of print jobs from the non-volatile

memory once the print job has been verified as having been completely printed, because the printer of Bender does not need that information when the print jobs are printed".

However, the Examiner is clearly disregarding the limitation that the respective image data address in the non-volatile memory is cleared prior to the image data being resent. While the Examiner contends that it is inherent in Tamagaki that the information of the lost print data would be deleted from the memory because the printer does not need that information anymore when it performs printing with that resend print job, he has not established that such the information of the lost print data would be deleted prior to the image data being resent. Furthermore, that an arrangement/element of a reference "inherently" functions/operates in a specific manner is established only when there is **no other** possible manner in which the arrangement/element could function/operate. Since it is possible that the information of the lost print data could be deleted from the memory after the image data is resent, inherency is not established.

As to Bender, since the Examiner asserts that the information of print jobs is deleted from the non-volatile memory once the print job has been verified **as having been completely printed**, it is clear that that such sequence could in no way teach or suggest deletion prior to the image data being resent as the print job **could not** be verified **as having been completely printed** at this time.

Thus, neither Tamagaki nor Bender disclose or suggest such a controller for clearing a respective image data address in the non-volatile memory prior to the image data being resent by the corresponding terminal device.

II. In addition to the above reasons why the present claims are patentable over Tamagaki and Bender, Applicants wish to note that the present invention is characterized by "*determining means for determining ... whether any of the plurality of print jobs remain to be printed*" and "*resend request issuing means for requesting the terminal device that sent data of a respective print job to resend the data for each of the plurality of print jobs that it is determined remains to be printed*".

In Tamagaki, a request for resending the print data includes only the information on pages to be resent (See Fig. 11 S78, Fig. 13 S104). Thus, Tamagaki discloses a resend request *only to resend the data of one job*. Consequently, Tamagaki does not disclose the "determining means" and the "resend request issuing means" of claim 1. Bender also does not disclose the "resend request issuing means" of claim 1. Independent claims 9, 13, 15 and 16 have similar limitations to that recited in claim 1.

III. As set forth from the above, the present invention can not result from a combination of Tamagaki and Bender, considered alone or in combination. Consequently, the allowance of claims 1-6, 9-13, 15 and 16 is respectfully solicited.

### **CONCLUSION**

Accordingly, it is urged that the application is in condition for allowance, an indication of which is respectfully solicited. If there are any outstanding issues that might be resolved by an interview or an Examiner's amendment, Examiner is requested to call Applicants' attorney at the telephone number shown below.